

## **PROSTHETIC SPINAL DISC NUCLEUS WITH ELEVATED SWELLING RATE**

### **Abstract of the Disclosure**

A method of manufacturing a prosthetic spinal disc nucleus. The including forming a  
5 hydrogel core from a hydrogel material in a natural state. The hydrogel material in the natural  
state is characterized by a natural swelling rate. The hydrogel is treated in an alkaline solution  
having a pH of at least about 8. This treatment transitions the hydrogel core from the natural  
state to a treated state characterized by an elevated swelling rate. The elevated swelling rate is  
greater than the natural swelling rate. The resultant, treated hydrogel core forms at least a portion  
10 of a prosthetic spinal disc nucleus that is otherwise sized for insertion into a spinal disc nucleus  
cavity. In one particular embodiment, the hydrogel core is inserted into a constraining jacket.  
Another aspect of the present invention relates to a prosthetic spinal disc nucleus including a  
hydrogel core having the elevated swelling rate.